

IN THE SPECIFICATION:

On page 1, please replace the paragraph as follows:

This application is related to co-pending application Serial No. 09/887,905 entitled "CLOCK GENERATION SYSTEMS AND METHODS," filed concurrently herewith and commonly assigned, the content of which is hereby incorporated by reference.

On page 12, please replace the paragraph as follows:

Next, the mixed signal interface is tested (step 70). The mixed signal interface can be tested in accordance with the teaching of a co-pending, commonly owned application entitled "SYSTEMS AND METHODS FOR SELF-CALIBRATION TESTING", filed concurrently herewith and having Application Serial No. 09/930,828, the content of which is incorporated-by-reference herewith. As taught therein, the chip has hot-electron sensors (deep well diodes), hot electron generators (small ring oscillators), temperature sensors (simple diodes with metallization to screen out the light), and heaters (simple polysilicon resistors placed over a diode and transistors). A high precision analog to digital converter (in one implementation, a 12 bit delta-sigma ADC) captures calibration data based in part on voltage variations or temperature variations, among others, and stores the calibration data in the embedded memory for subsequent processing.